

PR4



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
.09/451,699	11/30/1999	CHRIS K WENSEL	073388.0122	9403

7590 04/17/2003

BAKER & BOTTS L L P
2001 ROSS AVENUE
DALLAS, TX 752012980

EXAMINER

WON, YOUNG N

ART UNIT	PAPER NUMBER
----------	--------------

2155

DATE MAILED: 04/17/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

PR4

Office Action Summary	Application No.	Applicant(s)	
	09/451,699	WENSEL, CHRIS K	
	Examiner	Art Unit	
	Young N Won	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-27 have been re-examined.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 12-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Burnett et al. (US Pat No.6006018).

Independent:

As per claim 12, Burnett teaches of a distributed computing system (see abstract: 1st sentence), comprising: a client object on a first network operable to request access to a server object on a second network (see abstract and col.2 lines 23-26 & 62-67); a third network connecting the first network to the second network (see Fig.1 and Fig.2); a boundary device controlling access to the second network (see Fig.2, Server B and col.5, lines 57-60); a connections properties table in the first network and including an entry for each of one or more second networks accessible by the first network, the connections properties table including connection protocol information for accessing the one or more second networks (see Fig.6 #88 and col.9 lines 35-55); a connection manager (see Fig.3 #32) operable to generate a boundary traversal key for requests for access to server objects that have a corresponding entry in the connections properties table, the boundary traversal key generated from the corresponding connection protocol information (see col.5 lines 49-50 & 55-57, and col.7 lines 28-32), the boundary traversal key including information to traverse the boundary device controlling access to the second network (see col.5, lines 41-49).

Dependent:

As per claim 13, Burnett further teaches of further comprising a default connection manager operable to establish a connection between the client object and the server object using a default protocol for requests for access to server objects that do not have a corresponding entry in the connection properties table (see col.7 lines 26-41 & lines 52-67).

As per claim 14, Burnett further teaches wherein the third network is an Internet (see col.3 lines 64-65).

As per claim 15, Burnett further teaches of further comprising an object request broker operable to facilitate communications between the client object and the server object across the third network (see col.7 lines 34-36).

As per claim 16, Burnett further teaches wherein the connection manager is part of the object request broker (see Fig.3 and col.6 lines 39-45).

As per claim 17, Burnett further teaches wherein the connection properties table includes a boundary identifier for identifying the server object on the second network; a connection type for identifying the type of connection protocol used by the second network; authentication information for providing identity and credential information to the second network; and attributes for providing boundary traversal key information to the second network (see col.5 lines 21-22, col.7 lines 46-49, col.9 lines 44-54, and col.10 lines 3-5).

As per claim 18, Burnett further teaches wherein the connection properties table is stored in a private directory on the first network (see col.6 lines 45-48).

As per claim 19, Burnett further teaches wherein the boundary traversal key is generated from the authentication information and the attributes from an entry in the connection properties table corresponding to the server object on the second network (see col.7 lines 26-32).

As per claim 20, Burnett further teaches wherein the boundary identifier is an identifier selected from the group consisting of an Internet protocol address, an Internet

Art Unit: 2155

protocol address range, a partial Internet protocol address, a domain name, a partial domain name, or a port address and a port address range (see col.7 lines 26-28, col.9 lines 44-54, and col.24 lines 50-53).

As per claim 21, Burnett further teaches wherein the connection type indicates a TCP/IP connection, an SSL connection, an HTTP Tunneling connection, or a UDP/IP connection (see col.4 lines 30-33).

As per claim 22, Burnett further teaches wherein the authentication information includes user identification and a password (see col.19 lines 35-43).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burnett et al. (US Pat No.6006018) in view of Quinlan (US 6338089 B1).

Independent:

As per claim 1, Burnett teaches a method (see abstract: 2nd sentence) for traversing a boundary (see col.2, lines 23-31) in a distributed processing environment (see Fig.1 and col.4 lines 54-66), comprising: storing connection protocol information in a connection properties table for each boundary which may be traversed by the client network (see col.5 lines 21-22, col.7 lines 46-49, and col.10 lines 3-5); receiving a request from a client object on the client network for access to a server object on a server network (see abstract and col.2 lines 23-26 & 62-67), the server network having a server network boundary (see abstract: "translation gateway", col.2 lines 40-43, and col.8 lines 39-41); locating an entry in the connections property table corresponding to the requested server object (see Fig.6 #88 and col.9 lines 35-55); formatting a boundary traversal key from the connection protocol information associated with the located entry in the connection properties table (see col.5 lines 49-50: "PAGs"), the boundary traversal key including information to traverse a boundary controlling access to the server network (see col.5, lines 41-49); and forwarding the request for access and the boundary traversal key to the boundary controlling access to the server network (see col.5 lines 55-57). Burnett does not teach that the connection properties table is located at a client network. Quinlan teaches that the connection properties table is located at a client network (see Fig.1a #10-4; col.8, lines 14-23; and col.61, lines 16-21). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Quinlan within the system of Burnett to employ a connection properties table located on the client network within the boundary traversing method of a distributed processing environment because in the similar objective as the

teachings of Burnett to alleviate the client from having to know anything about the source of the object being requested (see Burnett: col.8, lines 1-13), Quinlan teaches of alleviating the server (see col.2, lines 58-60), therefore where the connection properties table is located is a matter of preference as to which network the system is to benefit; which network will do the processing.

As per claim 23, Burnett teaches of a distributed processing system (see Fig.1 #10A, #10B, & #10C, and col.4 line 2) with transparent (see col.7 lines 45-46) boundary traversal, comprising: a client system operable to request access to a plurality of server systems (see abstract and col.2 lines 23-26 & 62-67), at least one of the server systems having a boundary device for controlling access to the server system by the client system (see abstract: "translation gateway", col.2 lines 40-43, and col.8 lines 39-41); a connection properties table including: an identification range for identifying the at least one server system having the boundary device; a boundary type for identifying a type of the boundary device; authentication information for uniquely identifying the client system to the boundary device and a requested server system; and attributes for providing traversal information required by the boundary device (see Fig.6 #88 and col.9 lines 35-55); a boundary traversal key generator operable to generate a boundary traversal key for gaining access to the requested server system (see col.5, lines 41-49) through the boundary device (see Fig.2, Server B and col.5, lines 57-60), the boundary traversal key generated from the connection properties table in response to the boundary traversal key generator locating an entry matching the requested server system (see col.5 lines 49-50 & 55-57, and col.7 lines 28-32). Burnett does not teach of a connection

properties table stored in a private directory on the client system. Quinlan teaches of a connection properties table stored on the client system (see Fig.1a #10-4; col.8, lines 14-23; and col.61, lines 16-21). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Quinlan within the system of Burnett to employ a connection properties table located on the client system within the boundary traversing method of a distributed processing environment because in the similar objective as the teachings of Burnett to alleviate the client from having to know anything about the source of the object being requested (see Burnett: col.8, lines 1-13), Quinlan teaches of alleviating the server (see col.2, lines 58-60), therefore where the connection properties table is located is a matter of preference as to which system to benefit; which system will do the processing.

Dependent:

As per claim 2, Burnett further teaches of determining a connection type from the located entry in the connections property table (see col.9 lines 44-51).

As per claim 3, Burnett further teaches of passing the request for access to an object request broker (see Fig.3 and col.6 lines 39-40: "Translator") after the client network determines that the request for access is to an object residing outside the client network (see col.8 lines 1-13).

As per claim 4, Burnett further teaches wherein the object request broker (see Fig.3 and col.6 lines 39-48) locates the entry (see col.9 lines 44-51), formats the boundary traversal key (see col.6 lines 60-61), and forwards the request for access and

the boundary traversal key to server network (see col.5 lines 58-60 and col.7 lines 46-49).

As per claim 5, Burnett further teaches wherein storing connection protocol information includes storing a boundary identifier, a connection type, authentication information, and connection attributes in the connection properties table (see col.5 lines 21-22, col.7 lines 46-49, and col.10 lines 3-5).

As per claims 6, 7, and 8, Burnett further teaches wherein locating an entry includes matching an Internet protocol address, a domain name, and a port address for the server object to the boundary identifiers stored in the connection properties table (see col.7 lines 26-28, col.9 lines 44-54, and col.24 lines 50-53).

As per claim 9, Burnett further teaches wherein formatting the boundary traversal key includes building the boundary traversal key from the authentication information and the connection attributes in a format defined by the connection type (see col.7 lines 26-32).

As per claim 10, Burnett further teaches wherein forwarding the request includes forwarding the request for access and the boundary traversal key to the server network boundary (see col.5 lines 58-60 and col.7 lines 46-49).

As per claim 11, Burnett further teaches of further comprising receiving the request for access and the boundary traversal key at the server network boundary; allowing access to the server object if the server network boundary accepts the boundary traversal key; and denying access to the server object if the server network boundary rejects the boundary traversal key (see col.7 lines 23-26).

As per claim 24, Burnett further teaches of further comprising a network for connecting the client system to the server system (see Fig.1 #3).

As per claim 25, Burnett further teaches of further comprising an object request broker operable to facilitate communications between the client object and the server object across the network (see col.7 lines 34-36).

As per claim 26, Burnett further teaches wherein the network is an Internet (see col.3 lines 64-65).

As per claim 27, Burnett further teaches wherein the boundary traversal key generator is part of the object request broker (see Fig.6 and col.9 lines 35-55).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Young N Won whose telephone number is 703-605-4241. The examiner can normally be reached on M-Th: 8AM-6PM.

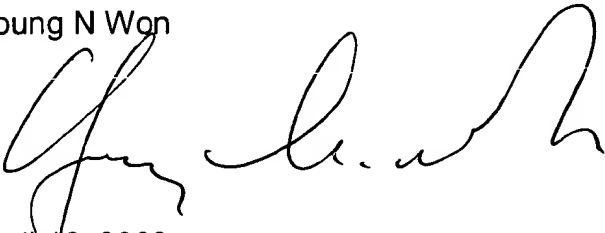
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Art Unit: 2155

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Young N Won

April 16, 2003

A large, stylized handwritten signature in black ink, appearing to read 'Young N Won'.A handwritten signature in black ink, appearing to read 'Ayaz Sheikh'.

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100